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## ABSTRACT

A study examined the impact of song writing, dramatization, and performance on third graders' ability to learn and retain social studies concepts. Students (n=18) were taught a unit on natural land forms and bodies of water in which they dramatized and performed songs which incorporated the main ideas of each unit. Upon completion of each unit, the students created dramatizations to demonstrate that they had mastered the concepts taught, and posttests were administered. Results were categorized and analyzed in three groups: below-grade-level readers, at-grade-level readers, and above-grade-level readers. Analysis revealed that although all students performed at an acceptable level of 80% and above on their presentations, posttest results indicated that only the students at and above grade level in reading performed at acceptable levels. Findings suggests that, although not all students reached acceptable levels of achievement, all students enjoyed the opportunity to sing and dramatize for their teachers and peers, indicating that this style of learning experience was motivating and rewarding for students. (Contains 26 references. Appendixes contain song lyrics, sample grade reports for 6 lessons, and sample pretests and posttests for 6 lessons.) (Author/BT)

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The Impact of Songwriting, Dramatization and Performance  
on Third Graders' Ability to Learn and Retain Social Studies Concepts

A Research Project

Presented to the

College of Education Faculty

San Diego State University

In Partial Fulfillment

of the Requirements for the Degree of

Master of Arts

in

Education

by

Deborah Carpenter

July 1999

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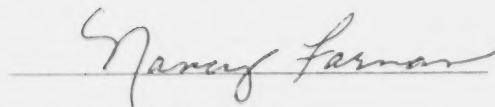
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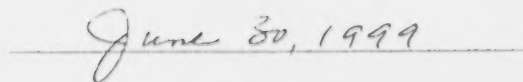
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Approved by

A handwritten signature in cursive script, reading "Nancy Farnan", written over a horizontal line.

Dr. Nancy Farnan

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Date

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### Abstract

This research study examines the impact of song writing, dramatization, and performance on third graders' ability to learn and retain social studies concepts. Students were taught a unit on natural land forms and water bodies in which they dramatized and performed songs which incorporated the main ideas of each unit. Upon completion of each unit, the students created dramatizations to demonstrate that they had mastered the concepts taught and post-tests were administered. Results were categorized and analyzed in three groups: below grade-level readers, at grade-level readers, and above grade-level readers. The analysis revealed that although all students performed at an acceptable level of 80% and above on their presentations, post-test results indicated that only the students at and above grade level in reading performed at acceptable levels. The researcher observed that although not all students reached acceptable levels of achievement, all students enjoyed the opportunity to sing and dramatize for their teacher and peers, indicating that this style of learning experience was motivating and rewarding for students.

## Chapter One

### Introduction

*"In the heart of a child is the wonder of learning, wanting to explore and discover, searching for the truth, perhaps seeking a better way"* (Kuklick, 1998, p. 1).

Elementary school students, curious and eager to learn, often find themselves drowning in subject matter that holds no personal meaning for them. Many are unfocused, which implies that the information presented is dull and lifeless. Young and Vardell (1993) referred to social studies text as the most dense and often least enjoyable informational nonfiction of all. The reason for this is that information compiled in social studies texts uses secondary sources. Textbook authors relate events from the perspective of others that they have not examined themselves. The result is a truly boring narrative (Scott, 1992). Scott (1992) remarked that "the judgement of countless Americans can be summed up in six words: I hated history in school" (p. 153). The concern of educators today is how to motivate students to learn and retain social studies concepts.

What is this *better way* that Kuklick refers to in the quote above? How can educators find a way of bringing subject matter to life in order to involve students in the learning experience? Dewey (1986) asserted that the experiences students have had in the classroom were of the wrong kind. Students lost their drive to learn because of the way learning was experienced. Learning thus became associated with boredom, and was accompanied by dull books. When learning is experienced in this manner, mastery and retention of concepts is not probable. On the other hand, Massich (1996), in reference to middle school students studying history, stated that most middle school students can't remember who wrote the Declaration of

Independence, yet surprisingly can memorize all the words to a pop or rap song. This *better way*, as Massich states, is to involve students in learning through mediums that are enjoyable and which provide motivation for them. The purpose of this research study is to find the *better way* to instruct students so that they assign personal meaning and importance to social studies lessons in order to learn and retain concepts.

### Defining the Research Question

The research question in this study was: What is the impact of songwriting, dramatization, and performance on third graders' ability to learn and retain social studies concepts? According to theorists and educators, successful learning can only occur when students are given the opportunity to bring their own personal experiences to the text they read, allowing them to experience meaning from it (Rosenblatt, 1991). Students are motivated to learn things which have personal significance for them. Therefore, by allowing students to *creatively* express their understandings, educators encourage students to become personally involved with new concepts and to become more motivated to learn. The purpose of the researcher was to discover whether students who write and perform songs and "act out" concepts are more motivated and able to retain concepts than when using a solely traditional, textbook-centered course of study.

The rationale for the importance of this study is threefold. Social studies, taught traditionally, can be tediously mundane for students. Teachers want students to participate in discussions and master concepts and are frustrated when students do not. It is critical that educators discover what types of learning experiences motivate students to want to learn, for it is this desire which leads to more meaningful connections and deeper understandings.

The hypothesis of this study is that an aesthetically pleasing program, incorporating the use of songwriting and dramatization, will motivate students to learn and will allow them to creatively construct personal meaning from text by experiencing it for themselves. The foundation for the hypothesis is that the resulting emotional connection will improve retention of third grade social studies concepts.

## Chapter Two

### Review of the Literature

The purpose of this study was to determine the impact of songwriting, dramatization and performance on third graders' ability to learn and retain social studies concepts. In order to present a comprehensive review of the literature which pertains to this question, various theoretical frameworks are addressed, followed by common misconceptions about theory, key components of an aesthetically designed instructional program, and a review of the research.

### Theoretical Frameworks

#### Experience and Education

The history of educational theory is characterized by two opposing views: education is either development from within or formulation without, which we call traditional (Dewey, 1986). In other words, education is a result of either the construction of meaning through personal experience or the accumulation of new knowledge in the environment. Dewey states that the rise of the "new" or progressive schools is a result of the discontent with traditional education. The discontent lies because the void between mature products and experience and the abilities of students is so wide that the style of instruction prevents active participation by students in the development of what is taught (Dewey, 1986). In other words, students cannot make meaning from new concepts for themselves unless they are first equipped with a sufficient amount of knowledge in that particular area. Dewey characterized these oppositions in three different ways: "direction from above vs. expression and individuality; discipline vs. free activity; and text and teacher vs. experience" (Dewey, 1986, p. 243). Dewey stressed the crucial relationship between experience and education, but argued that experiences and education are not directly equated to each other. Experience can be mis-educative if it prevents growth of

further experience. The experience students have must be personally significant. Dewey states that the central problem of experienced-based education is the selection of experiences that will live creatively in subsequent experiences.

### The Aesthetic Experience

Rosenblatt (1991) discussed the manner in which students retell text and asserted that in order to do it correctly, students must not only recall facts but must properly sequence a chain of events. This process is called "efferent learning," and the emphasis lies in retaining facts. She related that successful storytelling, however, gives the teller the creativity to enhance and edit facts and to reconceive structures. This is called "aesthetic learning": students are actively living through their experience and are interacting with the text. Silverman (1997) also described the aesthetic experience as "one that combines affective and cognitive knowing, includes the experience or narrative of learners, and actively embraces imagination, intuition, multiple perspectives, and expressive interpretations as an integral part of learning" (p. 74).

Aesthetic experiences are those which hold meaning for students because they have had part in its construction (Rosenblatt, 1991). She asserted that the lifting of the experience off the page motivates students to comprehend and gives it importance. Rosenblatt (1991) characterized reading as a performing art.

### Multiple Sign Systems

Another way to view aesthetic experiences is through the context of multiple sign systems. According to Berghoff (1998), we use sign systems, such as art, music, and drama, to construct and convey meanings for ourselves and others. Sign systems are complimentary and our thought processes uses a variety of these systems. She suggested that children who are not motivated to attend to oral or written language are more interested in expressing themselves in

art, music, or movement. It is through these other modalities that educators have the opportunity to make learning meaningful for all students. Vygotsky (1978) explained that multiple signs give humans the power to reflect on behavior and learning and to increase ability to remember and construct meaning.

### Reader Response

Sebesta (1997) believes that reader response, the act of constructing meaning from text, should "extend to humanities in literacy education, which would include creative drama and dramatic play, storytelling, music and dance" (p. 548). He suggested that teachers must promote a balance by encouraging and motivating learners to relive, predict, evaluate, connect, and link text with their own lives. Manning and Manning (1996) reinforced this as they described the bond between text and reader being strengthened through reader response. When students react to literature with sounds they hear, rhythms they create, drama they perform, as well as writing, they are developing in a myriad of ways. Students improve their thinking skills, as well as the quality of their writing through dramatizing and other modes of expression (Manning & Manning, 1996).

### Teacher Misconceptions

With such an extensive theoretical framework indicating the importance of an experienced-based, aesthetically engaging curriculum, what is the reason for its absence in many elementary and middle school classrooms? It is based on a series of misconceptions about reader response and the visual and performing arts. One popular misconception is that oracy, the visual arts, and music can apply only to fiction (Sebesta, 1997). Another belief is that only young children benefit from and enjoy these forms of expression. Berghoff (1998) indicated that "unfortunately, by 2<sup>nd</sup> and 3<sup>rd</sup> grade, most children are no longer encouraged to draw as they

write or to sing and dramatize what they know" (p. 521). Yet another mistake teachers make is to assume that activities in the oral and visual arts are "enrichment" activities to be added on later. Sebesta (1997) clarified this point in his statement, "Enrichment activities are better called extensions because their purpose is to extend transaction. They permeate the lesson, not put a caboose on it" (p. 546). A related North American study indicated that students and teachers thought classroom dramatization was the same as "doing a play" and thus would be too tedious and time consuming. The result, unfortunately, has been the reluctance to use drama as a teaching and learning tool in the classroom (McMaster, 1998). Sebesta (1995) summarized the opposition in education in his notion that the transactional view challenges the more traditional measurements of comprehension, which do little to incorporate reader response.

### Music

Harper (1985) stated that "children have an uninhibited affinity for music. It is desirable and natural to include music in the elementary school curriculum" (p. 218). Music also holds therapeutic value. It can be used to set a tone or mood, to lessen anxiety and encourage risk-taking, and to encourage calmness and soothe fears. In addition, songs foster motivation and encouragement for students to be involved participants, rather than sideline observers (Harper, 1985). Miles (1993) remarked that songwriting as a unique form of storytelling has received little attention in professional literature and also stressed its therapeutic rewards. The power behind the song is its ability to capture attention, elicit responses, communicate, create mood, and bring people together. Harper (1985) discussed the immediate sense of accomplishment gained from students writing songs in a joined effort. Creativity is fostered as well. According to Harper (1985), "Songs generate ideas and encourage original, unusual responses" (p. 218).

The social benefits of songwriting and performance in the classroom must not be overlooked. Song draws people together both emotionally and socially and encourages positive personal interactions with other learners. In observations of the social effect of music in the classroom, race, disability, and diversity of background experience are diminished as a community of learners achieves success with a song (Harper, 1985).

Music should not be considered purely for aesthetic value. It can also be a powerful tool for naming and understanding content area concepts. Through the songwriting process, the ability to organize, conceptualize and report events, feelings, and perspectives is nurtured (Miles, 1993). Massich (1996) suggested that if musically inclined students were given a chance to learn historical concepts through song, they would gain yet another vehicle for increasing their understanding of what they read and write. Scott (1992) discussed the significance of folk song in the high school classroom and described their incomparable value for introducing young people to their history and to their cultural heritage.

The challenge many educators face is that "music in the classroom involves risk taking for teachers" (Massich, 1996, p. 55). However, by singing in the classroom, the teacher "demonstrates bravery and emotional maturity, and challenges students to follow" (Scott, 1992, p. 166). If teachers want to encourage student risk-taking, they must be willing to leave their own comfort levels as well.

### Storytelling

A story provides a framework within which we think about ourselves, our place in the community, and in the world. Through a well-told narrative, one can interpret events from other perspectives and be empathetic to other people's points of view (Henegar, 1998). Because individuals understand concrete examples rather than vague abstractions, stories are used to build understandings between one another through shared experiences (Abrahamson, 1998). Therefore, Henegar (1998) indicated the result has been to turn life and experience into narrative in order to communicate issues in history and social studies.

In addition to music, storytelling can also be used to impact the mastery of nonfiction concepts as well. Abrahamson (1998) stated, "The ability to decipher meaning from a mountain of facts can be attributed to the facilitation offered by storytelling. Without stories as organizing frameworks, a student is swamped by the volume of the experience" (p. 448). Henegar (1998) described the reasons why students are motivated to listen to stories, rather than to expository text. He explained that people listen differently to stories than they do to conversation, lecture, or discussion. A well-told story creates openings that both teller and listener must fill with his or her own feelings, imagination and background. Stories keep our attention because they invite us to participate through our own emotions and experiences. Students are motivated by content that provokes their emotional and intellectual reactions (Fisher, 1996). Abrahamson (1998) stressed the need for instruction framed in this manner as he asserted that people often remember information the longest that has had emotional significance for them.

The most promising potential for storytelling, according to Abrahamson (1998), is its benefit for disadvantaged students. Storytelling can be a tool through which these students can master important concepts, while respecting their ethnic and cultural backgrounds.

### Drama

According to McMaster (1998), "the use of drama is based on the premise that an involved child is an interested child, an interested child will learn, and drama directly involves the child" (p. 574). Nelson (1988) suggested that in studying other cultures, the key to understanding behavior is the ability to develop new perspectives; this allows students to adapt the views of people from other points in history. Fisher (1996) asserted that when students have to adopt another character's personal and social circumstances, students begin to understand the dynamics that create these systems. Through drama, we observe from "within" a period and thus have a better understanding of other views, as well as our own. The following is an example of a student response following a dramatization of the Civil War (Nelson, 1988):

We were not sitting in an overheated classroom, participating in a discussion on round robin reading. We were there. We were cold, and yet sweating from our march. Our feet were wet. Our ears were ringing with the noise. It was approaching lunch time, we were hungry and thirsty. And we were looking across at another human being moving towards us with a ready bayonet. Drama had provided a doorway to the past (p. 20).

When students dramatize, they "become" whatever it is they are playing. Nonfiction dramatizations become event representations for children, as they change facts, vocabulary, and concepts into scenes that they will remember (McMaster, 1998). McMaster remarked that dramatizing events in nonfiction text gives nonfiction more of the excitement students associate

with fiction. Students now have a way to assign meaning to concepts and abstract vocabulary, thus increasing the retention of this information (McMaster, 1998).

The use of dramatic play has also been suggested to help improve skills and attitudes in other areas. It helps develop general representation skills that can carry over to reading and writing (Galda, 1989). The reading and writing of plays in the classroom motivates students to continue reading and thus helps teachers encourage and nurture life-long learners (McMaster, 1998). In addition, Gimmestad (1982) discovered that participation in ethnic drama decreased the prejudices of children because they had learned to view issues from different perspectives. Students who worked together with drama tended to develop positive attitudes toward each other (Gimmestad, 1982).

Why are students motivated to participate in drama in the classroom? Simply put, it's just plain fun. Drama builds interest and motivation because it is enjoyable and it because it lets students use their feelings and imaginations to express themselves (McMaster, 1998). Dramatization in the classroom is therefore not only a pleasurable experience, but one that can stimulate powerful and meaningful learning opportunities in the classroom. In short, "story theater brings about a human experience of deep reality" (San Jose, 1988, p. 27).

#### Research Findings

Because music, storytelling, and dramatization are often used in conjunction with each other in the classroom, the researcher has selected to present the research findings together, rather than within the context of previous sections. Many of the studies incorporated these components together to assess whether or not their usage in the classroom resulted in greater motivation and retention of social studies concepts.

In a nine month study of 16 pre-school classrooms' literacy behaviors, book-related dramatic play was observed to be an important part of the children's literacy interactions. The study indicated that it was much more than a context for literacy development. Instead, it seemed to be part of the process of comprehending books, expressing reactions and experiencing literature in a variety of methods (Rowe, 1998). This type of play provided a risk-free environment for children to construct meanings through their own perspectives and offered a variety of tools for student exploration and expression. This study indicates the importance of dramatic play in the early years.

In another study, a teacher used a teaching style which incorporated interpretive drama, including oral and visual presentations to encourage interaction. The students in this class realized that they were able to use drama to convey real facts after carefully interpreting text (Wolf, 1994).

Music and dramatization woven into the curriculum have seemed to elicit positive reaction, even at the college level. Karjala (1983) and a team of instructors conducted a study to determine the effect of designing an American history course which integrated music with role playing. The segments of the unit that made the greatest impression on students were role-playing sessions relating to women's suffrage and presidential elections. Students were required to demonstrate active student involvement and participation. The students benefited from research they did on presidential candidates and saw them as more than "facts in a book" (Karjala, 1983, p. 52). One student remarked that her role-playing experience in a women's suffrage segment showed her how women would act and feel at that time.

The most powerful part of this study was the final project. Instead of a final examination, students researched and wrote personas of historical figures related to the unit.

They prepared for a final two-hour role play in which they gathered for dinner at the home of one of the instructors. Students assumed the identity as they socialized, and made periodic presentations throughout the evening. This final role-play enabled students to combine role-playing skill with the historical knowledge they had acquired during the term. In their final evaluations, all students agreed that the strongest factor in their learning had been the creative element of instruction, specifically the role-playing (Karjala, 1983).

Fisher (1996) was interested in determining whether dramatic literature could teach values and belief systems to promote cultural understanding or empathetic responses in students. She conducted a simulation study in her 6<sup>th</sup> grade classroom which included all aspects of Greek life and culture. Students participated in text book readings, supplemental readings, activities, projects, reading myths and the dramatization of the Greek play, *Antigone*. After the play, students answered oral questions and incorporated higher-order thinking into responsive writing assignments. Fisher's observation was that "students were able to articulate responses which showed an understanding of beliefs, values, humanness of these ancient peoples, as well as their own personal values" (Fisher, 1996, p. 44). The responses she received indicated not only that students remembered the plot of the dramatic literature, but that drama motivated students to stretch their minds and hearts. She concluded that the use of dramatic literature had a significant impact on her students' understanding (Fisher, 1996).

Studies on the effects of aesthetic education have yielded positive results as well. Harvard Project Zero, a study involving the implementation of aesthetic education (multiple sign systems), has gathered a body of data which indicate that students learn at a higher cognitive level when art and music are incorporated (Berghoff, 1998). The Paul Getty Center (1993) which has continued to research the effects of aesthetic education, states that "due to aesthetic

experience, enrichment of life causes children to be more interested, ask more questions, offer their own views, and enjoy their learning" (Paul Getty Center, 1993, p. 3).

Finally, Berghoff (1998) conducted a research study using a multiple signs curriculum in an urban first grade classroom. She discovered that students learned to take ownership over the inquiry process. Students were involved in identifying, recognizing, and borrowing strategies which would help them construct meanings in their learning. She observed students discussing and recording concepts they had learned and generating new questions about those concepts. Berghoff (1998) attributed this growth towards independence to multiple sign systems. When students could draw upon many systems with which to make meaning, they always had ideas and improved their concentration. The study indicated that when readers are encouraged to develop a variety of tools for conveying human meaning, they are motivated to read and understand in any text (Berghoff, 1998).

The body of literature presented suggests that when students are given the opportunity to respond to and learn from text in a variety of ways, they find themselves experiencing learning rather than simply receiving it. The inclusion of music and dramatization provides motivation and the opportunity for students to actively construct meaning from information that might otherwise be abstract. Research suggests that when students are emotionally connected to their learning, they retain information better. The hypothesis here is that establishing an emotional connection between students and their learning, through the use of songwriting and dramatization, will increase motivation to participate, as well as ability to learn and retain social studies concepts. In reference to Kuklick's poem, my aim is to reach the heart of the child, by finding the *better way* for students to learn.

### Chapter 3

#### Methodology

##### Introduction

The purpose of this study was to determine whether a social studies unit which emphasizes song writing and performance, dramatization, and role play will lead to better retention of third grade social studies concepts. It is the researcher's hypothesis that third graders' active involvement in their learning will result in participation and understanding of these concepts.

##### Setting

The study took place in the researcher's third grade classroom at Midland Elementary School, located on Midland Road in the heart of the Poway Unified School District. Midland School is located in the portion of Poway frequently referred to as "Old Town" and serves the central area of the community. It is the oldest school facility in the Poway Unified School District and has a diverse socio-economic population. The majority of Midland's students are Caucasian; only 27% are non-Caucasian students. The school currently serves approximately 760 students and has 40 full-time certificated staff members.

##### Participants

The participants in this study were the teacher researcher and her 18 third grade pupils. The students were all Caucasian and spoke English as their primary language. The students' ages ranged from seven to nine years old, and their reading and writing ability levels ranged from early 2<sup>nd</sup> grade level to approximately 5<sup>th</sup> grade level. Two students received remedial resource assistance in reading and writing.

### Materials

The materials needed in this study will consisted of student pre-tests and post-tests for each lesson in the unit, Houghton Mifflin's *Sea To Shining Sea* social studies text, from which the unit was taught, student outlining sheets which accompanied the lessons, the six original songs which accompanied the lessons, and various art supplies for student projects and performances to demonstrate mastery of concepts in each lesson.

### Procedure

This research study began in late September and lasted approximately 4 months, concluding in late January. The study was both qualitative and quantitative by design. The researcher taught a unit entitled Natural Land Forms. This unit consisted of six lessons; each lesson addressed concepts in the following six areas: oceans, rivers, forests, prairies, mountains, and deserts. Each lesson taught consisted of several elements. Initially, the teacher administered a pre-test to determine any background knowledge of the concepts to be taught. Secondly, the teacher-researcher introduced the students to a teacher-written song about the land or water form to be studied. There was time to discuss, practice and perform the song with movements that the students created themselves and taught to each other. Students participated in reading and outlining the textbook lesson and created group projects which demonstrated if concepts had been retained. Lastly, students were given a post-test to determine what has been learned. Each element of the lesson will now be discussed in detail.

### Song Performance

The researcher introduced each lesson with a song that included concepts from the social studies lesson being taught (see Appendices A-F). Each song not only served as an anticipatory set to each lesson, but also was used to establish connections with concepts being taught. These were songs that the researcher had written and which were designed to address the concepts to be tested later in the lesson. Students practiced performing the song daily as an introduction to the day's study and as a transition activity. The researcher first modeled for the students by singing the song orally. The researcher then lead the students through the song, line by line, discussing interesting parts of the song and making predictions about unusual or new vocabulary as it was encountered. The researcher then explained to the students that when concepts are accompanied by kinesthetic (physical) movement that retention will be more likely.

The researcher elicited from students their ideas about appropriate movements for each line of the song's chorus. The researcher explained that an "appropriate" movement is one that portrays the idea behind each line of the song. After the researcher and children discussed the motions and practiced together, the students were placed in groups and assigned specific verses. Their task was to create movements for their designated verse which they then taught to the rest of the class. The students were given approximately 15 minutes to come up with their movements, followed by a whole-class teaching period, in which the entire class learned from each other the movements to the rest of the song. The objective was that these movements and the opportunity to teach others would enhance students' engagement level and motivation to perform. The students then performed the song every day that they studied social studies. In addition, they traveled to several other classrooms to perform each song as it was perfected.

In addition, each lesson was taught traditionally, with students previewing, reading, outlining, and discussing each lesson with the teacher researcher's guidance and modeling.

### Projects / Performances

After each lesson was read and discussed, students were given the opportunity to construct meaning from what they had read. Students formed groups of 2 or 4 (selected by the researcher to mix ability levels) and planned a performance that could be shared with the class. Each performance had to demonstrate that students had an understanding of the five or six main concepts of each lesson, as well as the key vocabulary (See Appendix G). Students had the choice of either creating a short skit or role play, writing and performing a poem or song, or creating an advertisement inviting tourists to come visit the area. The researcher gave each partnership written feedback on its presentation, in order that the students could use this information to improve their next performance. The researcher took notes during these presentations to record the types of projects being chosen and performed (detailed in Chapter 4) and to determine to what extent students demonstrated understanding of concepts. Because it was important that students were comfortable with performing in front of others, the first lesson on oceans focused entirely on practicing and performing the teacher-written song. The researcher also modeled for the students different possibilities for their projects and what they might look or sound like. For example, the teacher-researcher performed a skit with one of her students, in which the two pretended to be on a trip together on a sailboat in the middle of the Pacific Ocean. On their journey, they talked about how oceans compared to other bodies of water, they pointed out types of beaches along the coastline and how they were formed, and they pretended to encounter choppy waves and talked about what caused these waves to occur. The

teacher and student used props like rocks and sand to add "realia" to their presentation and they included all of the key vocabulary and their definitions in the course of the skit.

After the second lesson, students were expected to create projects of their own, as well as to perform the song which accompanied the lesson. For example, after the lesson on rivers had been completed, students chose to dramatize a skit in which they rafted down a river. As they traveled down the river, they pointed out items of interest along the way which related to our lesson and participated in a conversation which discussed where a river begins.

#### Quantitative Data Analysis

The researcher introduced each lesson with a pre-test (see Appendices H-M) to assess students' knowledge of the lesson prior to teaching it. The researcher also formally assessed students' understanding with a post-test at the end of each lesson. The post-tests (see Appendices N-S) were scored by percentage and were compared with the pre-tests to determine if the concepts had been learned. The acceptable level of achievement for post-tests was 80% and above. The data for this study consisted of pre-tests, observational notes of performances and student-created projects, and post-tests. The data for the pre-tests and post-tests were recorded and presented in three categories: below grade-level readers, grade-level readers, and above grade-level readers, in order that the researcher could compare the rate of improvement for each group of students. The students were also graded on the quality of their self-designed presentations. There were four major concepts to be addressed (see Appendix G), with a fifth component being mastery of the key terms for the lesson. Addressing each concept successfully was worth 20 percentage points for a total of 100%. Eighty percent was considered an acceptable score for the presentations. Students knew ahead of time the five areas on which they would be graded.

### Qualitative Data Analysis

During the time that the students were giving their presentations to demonstrate what they had learned, the researcher took notes and determined whether or not students in their groups or partnerships had demonstrated understanding of the concepts that had been taught. The qualitative data described the type of performance that was chosen, the style in which students presented, their interactions with their peers, and the amount of information they were able to accurately present to the whole class. A sample of the anecdotal note sheets the teacher-researcher used to observe and to grade student projects and performances is detailed in Appendix G.

## Chapter 4

### Research Findings

The purpose of this research study was to determine the effect of song writing, performance, and dramatization on a third grader's ability to retain social studies concepts. A unit was taught on Natural Land Forms in which third graders performed songs which accompanied each lesson and prepared a presentation which would demonstrate the concepts they had mastered from each lesson.

#### Quantitative Analysis

##### Pre- and Post-Test Comparisons

The students were grouped according to their reading level at the beginning of the year, so that their level of achievement could be compared with other students over the course of the unit. The students were grouped in the following manner:

| Below Grade Level<br>(5 students)          | At Grade Level<br>(5 students)               | Above Grade Level<br>(8 students)                                              |
|--------------------------------------------|----------------------------------------------|--------------------------------------------------------------------------------|
| Kirk<br>Leeann<br>Mason<br>Matt<br>Rebecca | Aaron<br>Bridget<br>Kate<br>Keirsten<br>Nick | Allie<br>Allison<br>Brian<br>Jesse<br>Khelsey<br>Lauren<br>Nicholas<br>Raelene |

The scores for the students on pre-tests and post-tests are illustrated by the tables on the following three pages. Prior to the study, the researcher determined that a score of 80% would indicate that the student had achieved an acceptable level of performance.

Table 1

Post-Test Scores for Students Reading Below Grade Level

| Student  | Pre-Test<br>Oceans | Post-Test<br>Oceans | Pre-Test<br>Rivers | Post-Test<br>Rivers | Pre-Test<br>Forests | Post-Test<br>Forests | Pre-Test<br>Prairies | Post-Test<br>Prairies | Pre-Test<br>Mtns. | Post-Test<br>Mtns. | Pre-Test<br>Deserts | Post-Test<br>Deserts |
|----------|--------------------|---------------------|--------------------|---------------------|---------------------|----------------------|----------------------|-----------------------|-------------------|--------------------|---------------------|----------------------|
| Kirk     | 50                 | 80                  | 53                 | 77                  | 60                  | 87                   | 57                   | 77                    | 47                | 87                 | 53                  | 72                   |
| Leeann   | 43                 | 47                  | 50                 | 57                  | 47                  | 67                   | 63                   | 77                    | 37                | 40                 | 57                  | 76                   |
| Mason*   | 33                 | 53                  | 13                 | 20                  | 60                  | 77                   | 47                   | 93                    | 33                | 67                 | 60                  | 76                   |
| Matt     | 67                 | 83                  | 63                 | 80                  | 57                  | 80                   | 57                   | 67                    | 67                | 80                 | 57                  | 45                   |
| Rebecca* | 20                 | 43                  | 23                 | 33                  | 40                  | 50                   | 47                   | 77                    | 43                | 53                 | 37                  | 52                   |

## Post-Test Average for Students Reading Below Grade Level (lessons 1-6):

Kirk: 80%

Leeann: 61%

Mason: 64%

Matt: 73%

Rebecca: 51%

AVERAGE FOR GROUP: 66%

\* indicates student receives resource assistance for reading and writing

Table 2

Post-Test Results for Students Reading At Grade Level

| Student  | Pre-Test<br>Oceans | Post-Test<br>Oceans | Pre-Test<br>Rivers | Post-Test<br>Rivers | Pre-Test<br>Forests | Post-Test<br>Forests | Pre-Test<br>Prairies | Post-Test<br>Prairies | Pre-Test<br>Mtns. | Post-Test<br>Mtns. | Pre-Test<br>Deserts | Post-Test<br>Deserts |
|----------|--------------------|---------------------|--------------------|---------------------|---------------------|----------------------|----------------------|-----------------------|-------------------|--------------------|---------------------|----------------------|
| Aaron    | 70                 | 100                 | 67                 | 97                  | 73                  | 90                   | 57                   | 83                    | 60                | 93                 | 73                  | 90                   |
| Bridget  | 53                 | 90                  | 47                 | 80                  | 70                  | 100                  | 73                   | 90                    | 63                | 80                 | 70                  | 80                   |
| Kate     | 70                 | 83                  | 63                 | 97                  | 67                  | 93                   | 57                   | 77                    | 67                | 80                 | 57                  | 62                   |
| Keirsten | 57                 | 67                  | 63                 | 73                  | 70                  | 87                   | 63                   | 70                    | 60                | 90                 | 50                  | 66                   |
| Nick     | 63                 | 73                  | 70                 | 83                  | 63                  | 87                   | 57                   | 87                    | 50                | 93                 | 53                  | 66                   |

Post-Test Averages for Students Reading At Grade Level (lessons 1-6):

Aaron: 92%

Bridget 87%

Kate 82%

Keirsten 76%

Nick 82%

AVERAGE FOR GROUP: 84%

Table 3

Post-Test Results for Students Reading Above Grade Level

| Student                                                                  | Pre-Test<br>Oceans | Post-Test<br>Oceans | Pre-Test<br>Rivers | Post-Test<br>Rivers | Pre-Test<br>Forests | Post-Test<br>Forests | Pre-Test<br>Prairies | Post-Test<br>Prairies | Pre-Test<br>Mtns. | Post-Test<br>Mtns. | Pre-Test<br>Deserts | Post-Test<br>Deserts |
|--------------------------------------------------------------------------|--------------------|---------------------|--------------------|---------------------|---------------------|----------------------|----------------------|-----------------------|-------------------|--------------------|---------------------|----------------------|
| Allie                                                                    | 70                 | 97                  | 77                 | 83                  | 73                  | 90                   | 70                   | 87                    | 63                | 100                | 67                  | 100                  |
| Allison                                                                  | 73                 | 83                  | 77                 | 93                  | 67                  | 100                  | 67                   | 97                    | 77                | 100                | 70                  | 100                  |
| Brian                                                                    | 57                 | 93                  | 60                 | 100                 | 63                  | 90                   | 70                   | 93                    | 70                | 100                | 80                  | 97                   |
| Jesse                                                                    | 70                 | 93                  | 70                 | 93                  | 50                  | 97                   | 63                   | 90                    | 47                | 97                 | 73                  | 93                   |
| Khelsey                                                                  | 67                 | 100                 | 73                 | 100                 | 70                  | 100                  | 77                   | 83                    | 80                | 100                | 77                  | n.a.                 |
| Lauren                                                                   | 77                 | 97                  | 47                 | 97                  | 67                  | 97                   | 73                   | 97                    | 73                | 100                | 80                  | 97                   |
| Nicholas                                                                 | 70                 | 97                  | 67                 | 87                  | 73                  | 97                   | 77                   | 97                    | 63                | 93                 | 77                  | 86                   |
| Raelene                                                                  | 50                 | 93                  | 60                 | 83                  | 67                  | 80                   | 70                   | 90                    | 60                | 97                 | 63                  | 76                   |
| Post-Test Averages for Students Reading Above Grade Level (lessons 1-6): |                    |                     |                    |                     |                     |                      |                      |                       |                   |                    |                     |                      |
| Allie:                                                                   | 93%                |                     |                    |                     | Jesse:              | 94%                  |                      |                       |                   | Nicholas:          | 93%                 |                      |
| Allison:                                                                 | 96%                |                     |                    |                     | Khelsey:            | 97%                  |                      |                       |                   | Raelene:           | 87%                 |                      |
| Brian:                                                                   | 96%                |                     |                    |                     | Lauren:             | 98%                  | AVERAGE FOR GROUP:   | 94%                   |                   |                    |                     |                      |

### Student Presentation Grades

The various groups' presentation grades for all six lessons consistently ranged from 80% to 100%. The grades were recorded on report forms as referenced in Appendix G. This result can be attributed to the fact that the groups of students participating were mixed-ability consistently, with one of the higher-achieving students being in charge of ensuring that all concepts were being addressed and that all students were participating in the presentation. In addition, the students understood what concepts would need to be addressed in their presentation and were given a copy of the grade report to be used. Therefore, they understood how they would be graded and could plan their presentation so that it would meet the criteria in the report.

### Qualitative Analysis

#### Song Performance

The students in the study enjoyed being introduced to each new lesson with a special song and were always eager to learn what tune it would be set to and how it would sound when the whole class sang it. The students were excited to talk about each line of the song and make predictions about what it might mean, and were even more anxious to begin making up their own movements to accompany the song.

When it was time to begin creating song movements, the researcher observed that students were excited to work together and were all making their opinions known to each other about what their suggestions were. The researcher noticed that while some groups were happy to come to consensus with little difficulty, other groups of students had more difficulty compromising with each other, and for this reason, there were some groups who had not finished deciding on movements when time had been called. The researcher observed that the students

chose and demonstrated movements which were appropriate for the concepts being addressed. For example, if the students' line of a song about rivers said, "after carving out wide canyons on its way" the students made a curving motion with both hands, beginning high up in the air and curving side to side all the way to the ground, to imitate a river meandering through a canyon. All students learned the appropriate movements from each other effectively and retained them easily. The researcher observed that the students would often refer back to the songs as they read from their text, making connections as they discovered them.

#### Student Presentations

Upon conclusion of each unit, the students were paired up in mixed-ability partnerships or groups and were given the option of performing a song, poem, skit, or advertisement which would demonstrate that they had mastered the main concepts of the lesson that had just been taught. The researcher observed that students were always very eager to do performances for their peers and were motivated to begin right away. The majority of students opted to prepare dramatizations, but a few performed television advertisements as well. The students were generally given one or two class sessions to prepare their performances, and were encouraged to use props, costumes, and other aids which would enhance their performance. Students also had the grade report criteria (see Appendix G) and were aware of the concepts they were responsible for covering. Some of the performances that the researcher observed for each lesson are detailed in the table on the following page.

Table 4

Observations of Student Presentations

| Lesson    | Sample of Researcher Observations                                                                                                                                                                                                                                                                                                                  |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Oceans    | This was the first lesson taught in the unit. Therefore, the students were not responsible for presenting a performance. Rather, the researcher and a student modeled for the class what a possible performance might look like. The researcher chose to do a role-play / dramatization of two people floating along the ocean in a sailboat.      |
| Rivers    | Leeann and Allie performed a skit in which they were in a canoe, traveling down the Colorado River in the Grand Canyon. Allie was the tour guide, and Leeann was a tourist asking questions about the river and its effect on the land. The girls illustrated concepts like erosion and flooding with colorful posters.                            |
| Forests   | Nicholas, Kirk, and Aaron did a performance in which Nicholas was a tree, Aaron was the soil, and Kirk was a squirrel. The boys demonstrated how they worked to help each other to survive in the forest.                                                                                                                                          |
| Prairies  | Raelene and Kate made up a television commercial, inviting people to pick up and move out to the prairie. In the commercial, the girls showed colorful posters of the land and gave reasons why the land would be so good for farming and raising animals.                                                                                         |
| Mountains | Brian, Khelsey, Rebecca, Matt, and Nick made up a skit in which the five of them were scouts going on a nature walk. They discussed the changes in temperature, plant life, and animal life that they observed as they continued to climb higher and higher up a mountain.                                                                         |
| Deserts   | Jesse, Keirsten, Mason, and Allison wrote a poem about the desert in which each one took on the role of a plant or animal and talked a little bit about how they would survive in the severe temperatures. They would then finish their section and pass the speaking responsibility on to the next participant until all the students had spoken. |

All of the students enjoyed these opportunities and worked together well. The researcher noticed that the students who were below grade level in reading were able to participate and demonstrate understanding of concepts nearly as well as those who were at or above grade level in reading.

## Chapter 5

### Conclusion

The purpose of this study was to determine the effects of song writing, performance, and dramatization on a third grader's ability to retain social studies concepts. The researcher taught a unit on Natural Land Forms in which third graders performed songs which accompanied the lesson. In addition, they prepared a presentation which would demonstrate the concepts they had mastered from each lesson.

### Discussion of Quantitative Results

#### Pre and Post Test Comparisons

The students who read at or above grade level performed well on post-tests for each of the six lessons. The students who read at grade level all performed at an average of 80% or above except for Keirsten, who had an average score of 76%. Of the students who read above grade level, all students performed at an average of 80% or above, with the majority of students falling above the 90% mark. However, the students who read below grade level did not perform as well as expected on the post tests. Although every student improved his/her score each time from pre-test to post-test, there was only one student who achieved an average score of 80% for all six post-tests, the score the researcher had determined would be an acceptable level of performance. The other students' average scores ranged from 51% to 73%, with the average for the group being 66%. The students who performed the best in this group were Matt and Kirk; Matt scored 80% or above on 4 out of 6 tests, while Kirk scored 80% on 3 out of 4. It is possible that the scores of these students may indicate that they had difficulty reading the test questions and thus did not perform as well as the other groups of students. Furthermore, two of the students in this particular group, Mason and Rebecca, have additional challenges with language

processing and comprehension of written and oral materials, and this may have contributed to the difficulty they had with the post-tests.

#### Presentation Grades

The grades for the student presentations were consistently 80% and above for every lesson in the unit. With a well-explained set of criteria, the students were able to plan and present a performance which addressed the main concepts and key vocabulary of each lesson. All students participated, including high and low achieving readers. The researcher observed that because the low-achieving students were given guidance and direction from their higher achieving peers, they were able to stay on task and recognize the importance of their participation in the group's overall grade. Therefore, the entire group was able to earn an acceptable grade on the presentation. In addition, the researcher noted that with each new lesson, students were becoming more comfortable with performing in front of their peers. Thus, they were able to elaborate and be more creative in their presentations.

#### Discussion of Qualitative Results

##### Song Performance

The students in this study were highly motivated to learn and perform the songs which accompanied this unit. Although some were shy at first about making up movements to accompany the songs, the fear soon subsided, and students were eager to lead the others in rehearsals and to come up with ideas for appropriate movements for each new verse. The researcher noticed that this activity was one in which all students could relax, have fun, and feel successful. All students were given the opportunity to help create, and all ideas were honored for the most part. The researcher's observation was that when students were informed that they would be performing for other students, it motivated them to work hard to perfect each song and

to give the movements serious thought. It was also important that the researcher made reference to the songs frequently throughout the teaching of new lessons, so that students would see that the songs were not only enjoyable, but that they also reinforced important concepts.

### Student Presentations

Throughout the unit, the researcher noticed that the students were always excited when given the opportunity to present or perform what they had learned from the lesson. Giving the students the criteria ahead of time kept the students focused on their task and kept them from straying off topic in their presentations. The researcher noticed that some of the lower-achieving students would lose interest during planning, and the researcher would remind the group that the grade would be assigned to all members of the group; therefore, all members had to be involved. It was observed that the higher achieving students would help to motivate and refocus the lower-achieving students by delegating parts for the presentation and by encouraging the lower-achieving students to decide what role they would like to play in the presentation. Positive peer interaction and support were critical to the success of this activity.

### Implications

The results of this study indicate that students cannot be assessed for their knowledge solely on the basis of written tests. The students in this study who read below grade level did continue to have difficulty on the written tests, yet were able to demonstrate knowledge of concepts in student created presentations and refer back to conceptual songs they had learned throughout the unit.

A second implication of the study is that students are motivated to learn new concepts when they are introduced in an enjoyable and creative way. Although not all students achieved at a level of 80% or above, it was the researcher's observation that all students enjoyed each

lesson and were motivated to participate in the creation of presentations which would demonstrate that they had learned the concepts of the lesson.

A final implication of this study is that students who have trouble reading will continue to have trouble performing on written tests, on which they must read and comprehend questions. Although incorporating kinesthetic movements and dramatization does give teachers an opportunity to observe if these students are actually learning, the fact is that when it comes time to demonstrate this knowledge on paper, students with reading and writing difficulties will continue to struggle. Although curriculum should be presented so that it incorporates a multitude of learning styles, the researcher believes that instruction of reading in the content area must be continuously addressed.

#### Limitations of the Study

The researcher found that the main limitation of the study was the amount of extra time it took to teach this unit in a classroom in which many other units and events were happening simultaneously. Teaching each lesson in the unit in this manner required much more time than was previously determined prior to the study. The researcher had originally planned for the unit to run approximately 6 to 8 weeks. As the unit progressed, however, the researcher realized that the study would realistically run for about four months. The researcher's program allowed for three days of social studies instruction per week. Because of the allowances made for library, P.E. instruction, assemblies, holidays, and other special events, the unit was prolonged. In addition, additional days had to be utilized for song introduction, performance, and student presentation planning, which lengthened each lesson as well.

### Recommendations for Future Research

It would be interesting to conduct a similar study again, where the researcher would give the students an opportunity to reflect on what they learned in the lesson in a more individualized manner. For example, instead of giving students a pre-written set of essay questions, students would be asked to describe orally what they felt were important concepts that they had learned in each lesson. In this way, students could reflect more on their presentations and song performances and might feel less anxious and inhibited by the written test questions. This would give the researcher a more accurate picture of whether or not students in this group had retained concepts or not.

Another relevant study would be to conduct this study with a treatment and a control group. The treatment group would study each lesson with an accompanying song and opportunities to perform, and the control group would engage strictly in textbook study. It would be interesting to compare students' achievement levels and degree of enjoyment for each of the lessons that were taught.

From the results of this study, one conclusion is clear. Although the quantitative results indicate that this study proved most successful for students reading at or above grade level, the singing and performances throughout the unit gave all students in the classroom one undeniable opportunity. It gave them the opportunity to experience and enjoy their own learning by making meaning of it for themselves. Therefore, the researcher feels positive that this study has shown this type of instruction to be beneficial for all students. As dedicated educators, however, we will always be in search of Kublick's better way for all students to learn.

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## Appendix A

## "Our Mighty Oceans"

(Sung to the tune of Old MacDonald Had a Farm)

Water bodies, big and bold, O-C-E-A-N,  
 Most of Earth's water, they do hold, O-C-E-A-N,  
 Pacific here, Atlantic there,  
 Here a wave, there a wave, everywhere a wave wave,  
 Filled with minerals, even gold, O-C-E-A-N!!

Always moving, you can bet, O-C-E-A-N,  
 So much salt yet always wet, O-C-E-A-N,  
 Waves crashing here, smashing there,  
 Here a crash, there a smash, everywhere a crash smash,  
 Slowly eroding the land, O-C-E-A-N!!

Along the coastline we can see, O-C-E-A-N,  
 Beaches formed by the turquoise sea, O-C-E-A-N,  
 Rocky here, sandy there,  
 Here a rock, there some sand, everywhere there's  
 built up land,  
 Shells are pounded up you see, by the O-C-E-A-N!!

## Appendix B

## "The River Runs"

(Sung to the tune of The Brady Bunch)

Here's the story, of a rushing river,  
 That was winding its way down from mountain high,  
 Beginning with melting snowfall,  
 It traveled side to side.  
 Till the one day when the river met the ocean,  
 After carving out wide canyons on its way,  
 Going faster as it trickled downward,  
 Making awesome journeys in a single day!

Chorus:                   The river bends,  
                               Fresh water runs,  
                               That's the way rivers  
                               Make their way to sea!

Now remember, when rains are heavy,  
 The river sometimes overflows its banks,  
 Causing flooding and devastation,  
 For this we don't give thanks.  
 Although the soil with flooding does get richer,  
 From all the precious moisture that sinks in,  
 And now this mighty moving river,  
 Makes us wonder where did all of it begin?

Chorus:                   The river bends,  
                               Fresh water runs,  
                               That's the way rivers  
                               Make their way to sea!

## Appendix C

## "The Forest Tale"

(Sung to the tune of Gilligan's Island)

Just sit right back and you'll hear a tale,  
 A tale 'bout a special place,  
 That's filled with trees, yes lots of trees,  
 The forest is its name.

The soil in the forest is very rich  
 And this you see is due,  
 To all the humus in the ground,  
 Remember trees die too!

The trees give homes to animals,  
 like birds and squirrels and more,  
 The branches are their blankets,  
 The trunk their own front door.

The trees provide good healthy food,  
 Like fruit and nuts and seeds,  
 And in order to say "thank you"  
 These creatures do good deeds.

(continued on next page)

Nuts and seeds they scatter round  
 And bury in the ground,  
 And come next spring there will be  
 New tree sprouts to be found.

When creatures die their bodies sink  
 And make the soil rich,  
 More trees can grow, oh don't you know  
 This is our hope and wish!

(Ending, Sung more slowly)

The forest is a precious place  
 Where many creatures live,  
 So help care for our forests,  
 It's the best gift you can give!

## Appendix D

## "Livin' On The Prairie Land"

(Sung to the tune of He's Got the Whole World In His Hands)

We see flat flat land, covered by grass,  
In the Midwestern states, there's lots of grass,  
We see just a few trees, but a sea of grass,  
We're livin' on the prairie land.

Farmers grow lots of crops, to harvest and pitch,  
Because the soil on the prairie is oh so rich,  
So many grains to harvest and pitch,  
Growing food on the prairie land.

When you're livin' on the plains, you gotta run,  
Or you can travel in herds, but you gotta run,  
Or you can burrow underground, but you gotta run,  
When you're livin' on the prairie land.

You gotta watch for coyotes if you're a prairie dog,  
You gotta live with other neighbors as a prairie dog,  
You gotta watch for predators as a prairie dog,  
Cause you are prey on the prairie land.

We see flat flat land, covered with grass,  
We hear the thunderin' of bison, as they pass,  
We feel the tickly blades in the sea of grass  
We're livin' on the prairie land.

## Appendix E

## "We'll Be Climbin' Up That Mountain"

(Sung to the tune of She'll Be Coming Round the Mountain)

We'll be climbin' up that mountain, yes we will,  
 "Cause a mountain's so much higher than a hill,  
 We'll be climbin' up that mountain,  
 We'll be climbin' up that mountain,  
 We'll be climbin' up that mountain, yes we will.

It's getting so much colder as we climb,  
 Pretty soon we're going to reach the timberline,  
 It's getting so much colder,  
 Yes it's getting so much colder,  
 Yes the temperature is dropping as we climb.

Only certain plants and trees know how to find,  
 Ways to live up above the timberline,  
 Only certain plants and trees,  
 Can manage not to freeze,  
 Like the columbine and bristlecone pine.

Oh the mountains change the weather, wonder why?  
 They make the clouds drop rain from way up high,  
 As the clouds pass moving east,  
 They get tickled by the peaks,  
 And the west gets rain but east it's hot and dry.

Oh what kinds of creatures live on rocky peaks?  
 What kinds of creatures live on rocky peaks?  
 Bighorn goats must think its neat,  
 With their sturdy legs and feet,  
 To be able to run free on rocky peaks.

We'll be climbin' up that mountain yes we will,  
 Cause a mountain's so much higher than a hill,  
 We'll be climbin' up that mountain,  
 We'll be climbin' up that mountain,  
 We'll be climbin' up that mountain yes we will!

## Appendix F

## "Sweatin' In The Desert"

(Sung to the tune of I've Been Working On the Railroad)

I've been sweatin' in the desert,  
 All the live long day,  
 It's a place with very little water,  
 And I'm tryin' to find some shade.

The temperature's always changin'  
 From burning hot to freezing cold,  
 The only plant that can stand it is the cactus,  
 Because of water it can hold.

Chorus:           Animals must hide,  
                   Hunt and play at night,  
                   They've got to adapt if they want to survive,  
                   Animals must hide,  
                   Hunt and play at night,  
                   Desert animals do survive.

In the steamy desert,  
 Creatures burrow in the sand,  
 Some get water from their food,  
 Keepin' cool on the hot dry land,  
 They mighty Saguaro cactus,  
 Drinks water through its roots like a straw,  
 Then saves the water up for later,  
 It's the neatest thing I ever saw!

Chorus:           Animals must hide,  
                   Hunt and play at night,  
                   They've got to adapt if they want to survive,  
                   Animals must hide  
                   Hunt and play at night,  
                   Desert animals do survive.

## Appendix G

Grade Reports:  
 Concepts to be Presented in Each Lesson

Lesson One: Sand and Salt (oceans):

| Concepts                                                              | Points |
|-----------------------------------------------------------------------|--------|
| 1. Describe what an ocean is and compare it to other bodies of water. |        |
| 2. Describe how oceans affect the land.                               |        |
| 3. Describe how rocky beaches are formed.                             |        |
| 4. Describe how sandy beaches are formed.                             |        |
| 5. Key Terms: erosion, ocean, coast                                   |        |
| Notes or Comments on Presentation:                                    |        |

Lesson Two: Running Rivers (rivers):

| Concepts                                                               | Points |
|------------------------------------------------------------------------|--------|
| 1. Describe what a river is and how it differs from an ocean.          |        |
| 2. Describe how a river travels over land and how it changes the land. |        |
| 3. Describe where a river begins and ends.                             |        |
| 4. Describe the positive and negative effects of flooding.             |        |
| 5. Key Terms: river, flood, canyon                                     |        |
| Notes or Comments on Presentation:                                     |        |

Lesson Three: Life In An Eastern Forest (forests):

| Concepts                                              | Points |
|-------------------------------------------------------|--------|
| 1. Describe what a forest is and what it looks like.  |        |
| 2. Describe how trees help the animals of the forest. |        |
| 3. Describe how trees help the forest soil.           |        |
| 4. Describe how animals help the trees.               |        |
| 5. Key Terms: forest, humus                           |        |
| Notes or Comments on Presentation:                    |        |

Lesson Four: A Sea of Grass (prairies):

| Concepts                                                            | Points |
|---------------------------------------------------------------------|--------|
| 1. Describe what a prairie is and where it is located.              |        |
| 2. Describe the soil on the prairie and what it is used for.        |        |
| 3. Describe three ways animals escape from predators.               |        |
| 4. Describe the different animals you might encounter on a prairie. |        |
| 5. Key Terms: prairie, predator, prey                               |        |
| Notes or Comments on Presentation:                                  |        |

Lesson 5: Touching The Clouds (mountains):

| Concepts                                                           | Points |
|--------------------------------------------------------------------|--------|
| 1. Describe what a mountain is.                                    |        |
| 2. Describe the plant and tree life on a mountain.                 |        |
| 3. Describe the animal life on a mountain.                         |        |
| 4. Describe how mountains affect the weather and land around them. |        |
| 5. Key Terms: mountain, temperature, timberline                    |        |
| Notes or Comments on Presentation:                                 |        |

Lesson 6: A Dry Place (deserts):

| Concepts                                                  | Points |
|-----------------------------------------------------------|--------|
| 1. Describe what a desert is.                             |        |
| 2. Describe what happens to the temperature in a desert.  |        |
| 3. Discuss what animals must do to survive in the desert. |        |
| 4. Describe how plants survive in the desert.             |        |
| 5. Key Terms: desert, temperature, climate                |        |
| Notes or Comments on Presentation:                        |        |

## Appendix H

Lesson 1 Pre-Test:  
"Sand and Salt" (30 points possible)

Part One: Fill in the blank with the word that would make the best sense. (2 pts. each)

1. The \_\_\_\_\_ is the land along the edge of an ocean.
2. The largest ocean in the world is called the \_\_\_\_\_ Ocean.
3. Ocean water is not healthy to drink because it contains so much \_\_\_\_\_.
4. An \_\_\_\_\_ is a large body of salt water.
5. The term \_\_\_\_\_ refers to the wearing away of land by wind or water.
6. The second largest ocean is called the \_\_\_\_\_ Ocean and it is on the \_\_\_\_\_ border of the United States.
7. \_\_\_\_\_ beaches are formed when waves only pound rocks together a little bit.

Part Two: True or False? Mark each statement with a T or an F. (1 pt. Each)

8. Ocean water never stops moving. \_\_\_\_\_
9. It is perfectly safe to build a house on a cliff over the ocean. \_\_\_\_\_
10. Oceans are able to take away land and build up land. \_\_\_\_\_
11. The ocean only covers about  $\frac{1}{4}$  of the Earth's surface. \_\_\_\_\_
12. Ocean water can only wear away softer, weaker types of rock. \_\_\_\_\_
13. When rocks and shells are pounded up a lot, this creates sand. \_\_\_\_\_
14. The Pacific Ocean borders the United States on the east. \_\_\_\_\_

Part Three: Written Response. (3 pts.) Please answer in complete sentences.

15. Should a house be built on a cliff near the ocean? Why or why not?

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16. How does the ocean wear away and build up land?

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17. How is a sandy beach formed?

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## Appendix I

Lesson 2 Pre-Test  
"Running Rivers" (30 points possible)Part One: Fill In the Blank (2 points each)

1. A \_\_\_\_\_ is a pool of fresh water which sits on land.
2. The type of water that is found in rivers and lakes is called \_\_\_\_\_ water.
3. Rivers can be either narrow or \_\_\_\_\_.
4. A \_\_\_\_\_ is a stream of water that flows across land.
5. When water overflows its banks, this is called a \_\_\_\_\_.
6. A difference between rivers and lakes is that rivers \_\_\_\_\_ and lakes don't.
7. Rivers can be \_\_\_\_\_ or shallow.

Part Two: True Or False (1 point each)

1. Rivers sometimes stop moving from time to time. \_\_\_\_\_
2. The slope of the land tells whether a river will move slowly or quickly. \_\_\_\_\_
3. Rivers can be caused by heavy rain or tidal waves. \_\_\_\_\_
4. Rivers can start at the ocean. \_\_\_\_\_
5. A river moves because it flows downhill. \_\_\_\_\_
6. Fresh water means water that has extra salt in it. \_\_\_\_\_
7. Floods are always harmful. \_\_\_\_\_

Part Three: Essay Questions (3 points each). Answer in COMPLETE SENTENCES!

1. How are a river and a lake different? Name two ways.

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2. How do rivers change the shape of the land?

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3. How are rivers different than oceans? Name at least two differences.

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## Appendix J

## Lesson 3 Pre-Test

## "Life In An Eastern Forest" (30 points possible)

Part I: Fill In The Blank: (2 pts. each)

1. \_\_\_\_\_ is decayed, rotten material that helps new trees to grow.
2. Trees are important to the forest because they help prevent \_\_\_\_\_.
3. When soil has humus in it, it stays \_\_\_\_\_ and healthy.
4. A \_\_\_\_\_ is a large area of land thickly covered by trees.
5. There are three types of forests that grow in the United States. Name them on the line below.  
\_\_\_\_\_
6. The roots of trees are similar to \_\_\_\_\_ because they hold onto the soil.
7. The animals get both \_\_\_\_\_ and \_\_\_\_\_ from the trees in the forest.

Part Two: True or False

1. Trees help animals, but animals aren't able to help the trees. \_\_\_\_\_
2. When animals die, their bodies help the soil become richer. \_\_\_\_\_
3. If the forests were cut down, most animals would still survive. \_\_\_\_\_
4. Two animals that make their homes in trees are squirrels and bears. \_\_\_\_\_
5. Animals help trees to grow by eating the leaves off the trees. \_\_\_\_\_
6. Humus is made out of sand, clay, and stones. \_\_\_\_\_
7. When forests disappear, the soil washes away and plants can't grow. \_\_\_\_\_

Part Three: Answer each question in complete sentences. Give as much detail as you can.  
(3 pts. each).

1. What would happen to the forest if all of the animals suddenly disappeared? Explain.

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2. Give three reasons why forests are important.

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3. How do trees help the soil in the forest?

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## Appendix K

Lesson 4 Pre-Test  
"A Sea of Grass" (30 points possible)Part One: Fill In The Blank (2 pts. each)

1. An animal who hunts down other animals for food is called a \_\_\_\_\_.
2. Prairie grass can either be \_\_\_\_\_ or \_\_\_\_\_.
3. Prairie soil is great for farming \_\_\_\_\_ because the soil is so \_\_\_\_\_.
4. An area of flat or hilly land covered with \_\_\_\_\_ is called a \_\_\_\_\_.
5. An animal that gets hunted and eaten is called the \_\_\_\_\_.
6. The more \_\_\_\_\_ there is, the taller the grass will grow.
7. The \_\_\_\_\_ part of the United States is where most prairies are located.

Part Two: True or False (1 pt. each)

1. The western prairies get less rain than the eastern prairies, so the grass in the west is shorter. \_\_\_\_\_
2. Prairie dogs tend to live by themselves in burrows. \_\_\_\_\_
3. It is safer for prairie animals to travel in groups than alone. \_\_\_\_\_
4. The buffalo is the fiercest predator on the prairie. \_\_\_\_\_
5. Two ways prairie animals can escape predators is by hiding in trees or behind buildings. \_\_\_\_\_
6. Buffalo on the prairie often create lots of cloudy smoke as they travel. \_\_\_\_\_
7. A farmer would make a good living on the prairie. \_\_\_\_\_

Part Three: Essay Questions (3 pts. each)

1. What might you see if you were traveling across the prairie on a covered wagon? Include animals, plants, and other details in your answer.

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2. How do prairie animals escape from predators?

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3. How is a prairie different than a forest? Give at least two differences.

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## Appendix L

Lesson 5 Pre-Test  
"Touching the Clouds" (30 points possible)Part One: Fill In The Blank (2 points each)

1. A natural part of the earth's surface is called a \_\_\_\_\_.
2. The \_\_\_\_\_ is the height at which trees can no longer grow.
3. The only trees strong enough to grow at higher levels in the mountains are the \_\_\_\_\_ and the \_\_\_\_\_.
4. A \_\_\_\_\_ is a piece of land which is higher than a hill.
5. When we talk about \_\_\_\_\_ we mean how hot or cold something is.
6. As you climb a mountain, you might notice the air around you getting \_\_\_\_\_.
7. One animal who is able to survive on mountain peaks is a \_\_\_\_\_.

Part Two: True-False (1 point each)

1. Mountain climbing and jumping are easy for the bighorn sheep. \_\_\_\_\_
2. As air rises, it gets warmer. \_\_\_\_\_
3. Less rain falls on the land west of the mountains than on the east. \_\_\_\_\_
4. Many animals can survive above the timberline. \_\_\_\_\_
5. Mountains can change the weather and the land around them. \_\_\_\_\_
6. When clouds rise, they dry up and turn into sunshine. \_\_\_\_\_
7. Mountains cause the land on the east to be dry and desert-like. \_\_\_\_\_

Part Three: Essay Questions (3 points each). Answer in COMPLETE sentences. Use the turn around rule to make sure your answers are complete and include as much detail as possible.

1. How does the plant and animal life on a mountain change from summer to winter time? Please talk about both plant and animal life in your answer.

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2. Draw a picture to show what happens to the land around a mountain.

3. How do mountains change the weather?

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## Appendix M

Lesson 6 Pre-Test  
"A Dry Place" (30 points possible)Part One: Fill In the Blank (2 points each)

1. The usual temperature of an area over a long time is called the \_\_\_\_\_.
2. The desert is not good for growing plants because there is little \_\_\_\_\_ in the soil.
3. Because the temperature always \_\_\_\_\_, it is difficult to grow plants in the desert.
4. A \_\_\_\_\_ is an area where very little \_\_\_\_\_ falls.
5. An animal with long pointed toes that walks on sand is called a \_\_\_\_\_.
6. The \_\_\_\_\_ region of the United States is where most deserts are located.
7. Desert animals get \_\_\_\_\_ from the food that they eat.

Part Two: True Or False (1 point each)

1. Desert animals can survive the heat by burrowing underground. \_\_\_\_\_
2. A cactus sticks its roots DEEP INTO THE SOIL so that it can get water. \_\_\_\_\_
3. The Saguaro cactus can grow arms as soon as it reaches 1 foot tall. \_\_\_\_\_
4. In the desert, it is much more pleasant in the daytime than at night. \_\_\_\_\_
5. A Saguaro cactus helps desert animals in many ways. \_\_\_\_\_
6. The climate of an area means the temperature over a few hours of the day. \_\_\_\_\_
7. Deserts are hot and dry all the time. \_\_\_\_\_

Part Three: Essay Questions (3 points each). Answer in COMPLETE SENTENCES!

1. What do animals do when it is nighttime in the desert? Give as much detail as possible.

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2. How to plants and animals manage to survive in the desert? Make sure to talk about plants and animals in your answer.

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3. How is a desert different than a prairie? Give at least two differences.

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## Appendix N

Lesson 1 Post Test:  
 "Sand and Salt" (30 points possible)

Part One: Fill in the blank with the word that would make the best sense. (2 pts. each)

1. A large body of salt water is called an \_\_\_\_\_.
2. Land along the edge of an ocean is called the \_\_\_\_\_.
3. When the ocean wears away land, it is called \_\_\_\_\_.
4. The \_\_\_\_\_ ocean is the largest ocean in the world and it borders the United States on the \_\_\_\_\_.
5. The second largest ocean, the \_\_\_\_\_ ocean, borders the United States on the \_\_\_\_\_.
6. Because of all the \_\_\_\_\_ in the water, ocean water is unsafe to drink.
7. When waves only pound rocks and shells together a little bit, \_\_\_\_\_ beaches form. When rocks and shells are pounded a lot, \_\_\_\_\_ beaches form.

Part Two: True or False? Mark each statement with a T or an F. (1 pt. Each)

8. The ocean covers over half of the earth's surface. \_\_\_\_\_
9. Ocean water usually stops moving when it gets warm. \_\_\_\_\_
10. Ocean water can wear away all kinds of rock. \_\_\_\_\_
11. Houses built on cliffs are in no danger from the ocean. \_\_\_\_\_
12. Sand is made up of pounded rocks and shells. \_\_\_\_\_
13. Oceans take away land from the coast and also build up land. \_\_\_\_\_
14. The Atlantic Ocean borders the U.S. on the west. \_\_\_\_\_

Part Three: Written Response. (3 pts.) Please answer in complete sentences.

15. How do oceans wear away the land?

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16. How come some beaches are sandy and others are rocky?

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17. Would you recommend that a person build a beach house on a cliff near the ocean? Why or why not?

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## Appendix 0

Lesson 2 Post Test  
"Running Rivers" (30 points possible)Part One: Fill In the Blank (2 points each)

1. A stream of water that flows across land is a \_\_\_\_\_.
2. A pool of water on land is called a \_\_\_\_\_.
3. A \_\_\_\_\_ happens when water overflows its banks.
4. Water that comes from rivers and lakes is called \_\_\_\_\_ water.
5. A difference between rivers and lakes is that rivers \_\_\_\_\_.
6. Rivers can be wide or \_\_\_\_\_.
7. Rivers can be deep or \_\_\_\_\_.

Part Two: True Or False (1 point each)

1. Rivers can start at the ocean. \_\_\_\_\_
2. Rivers are always moving. \_\_\_\_\_
3. A river moves because it flows downhill. \_\_\_\_\_
4. If land is steep, the river moves slowly. \_\_\_\_\_
5. Rivers have salty water in them. \_\_\_\_\_
6. Heavy rains and melting snow cause rivers. \_\_\_\_\_
7. Floods are always harmful. \_\_\_\_\_

Part Three: Essay Questions (3 points each). Answer in COMPLETE SENTENCES!

1. What is the difference between a river and an ocean? Give at least two differences.

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2. What is the difference between a river and a lake? Give at least two differences.

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3. How do rivers change the shape of a valley?

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## Appendix P

Lesson 3 Post Test  
"Life In An Eastern Forest" (30 points possible)Part I: Fill In The Blank: (2 pts. each)

1. A large area of land thickly covered by trees is a \_\_\_\_\_.
2. Decayed material that helps trees to grow is called \_\_\_\_\_.
3. Three types of forests that grow in the United States are:
  1. \_\_\_\_\_
  2. \_\_\_\_\_
  3. \_\_\_\_\_
4. Trees are important because they help stop \_\_\_\_\_.
5. The roots of trees act like tiny \_\_\_\_\_, because they hold onto the soil.
6. Humus makes soil \_\_\_\_\_ and healthy.
7. The forest gives \_\_\_\_\_ and \_\_\_\_\_ to many animals.

Part Two: True or False

1. Squirrels and birds make their homes in tree branches. \_\_\_\_\_
2. Although trees help animals, the animals are unable to help trees. \_\_\_\_\_
3. Animals help trees grow by scattering nuts and seeds in the ground. \_\_\_\_\_
4. When animals die, they can poison the soil so trees can't grow. \_\_\_\_\_
5. Humus is made of sand, clay, and stones. \_\_\_\_\_
6. If forests are cut down, most animals would still survive. \_\_\_\_\_
7. When forests disappear, soil washes away and plants can't grow. \_\_\_\_\_

Part Three: Answer each question in complete sentences. Give as much detail as you can.  
(3 pts. each).

1. Why are forests important? Give three reasons.

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2. How do trees and animals help each other to survive in the forest?

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3. How might a forest be different if no animals lived in it? Explain what could happen.

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## Appendix Q

Lesson 4 Post Test  
"A Sea of Grass" (30 points possible)Part One: Fill In The Blank (2 pts. each)

1. A \_\_\_\_\_ is an area of flat or hilly land, covered with \_\_\_\_\_.
2. A \_\_\_\_\_ is an animal who hunts other animals for food.
3. An animal that gets hunted and eaten is called the \_\_\_\_\_.
4. Most prairies can have grass that is either \_\_\_\_\_ or \_\_\_\_\_.
5. The amount of \_\_\_\_\_ affects how tall the grass will grow.
6. Prairie soil is very \_\_\_\_\_ and because of this, farmers can grow \_\_\_\_\_.
7. Most of the prairies are in the \_\_\_\_\_ part of the United States.

Part Two: True or False (1 pt. each)

1. The coyote is the fiercest predator on the prairie. \_\_\_\_\_
2. The western prairies get less rain than the eastern prairies, so the grass in the west is taller. \_\_\_\_\_
3. One way prairie animals can escape predators is by hiding in trees. \_\_\_\_\_
4. Prairie dogs tend to live by themselves in burrows. \_\_\_\_\_
5. If you were on the prairie and you saw a cloud of dust and smoke in the distance, it would probably be because of a fire. \_\_\_\_\_
6. It is safer for prairie animals to travel alone than in groups. \_\_\_\_\_
7. Farmers often move to states where there are prairies. \_\_\_\_\_

Part Three: Essay Questions (3 pts. each)

1. Compare the way forest animals and prairie animals escape from predators.

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2. How is a prairie different than a forest? Give at least two differences.

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3. If you were traveling in a covered wagon across a prairie one hundred years ago, what might you see? Give as much detail as you can.

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## Appendix R

Lesson 5 Post Test  
 "Touching the Clouds" (30 points possible)

Part One: Fill In The Blank (2 points each)

1. A piece of land higher than a hill is called a \_\_\_\_\_.
2. A \_\_\_\_\_ is a natural part of the earth's surface.
3. The \_\_\_\_\_ of the air means how hot or cold it is.
4. The height where trees can no longer grow is called the \_\_\_\_\_.
5. The air in high places is \_\_\_\_\_ than in low places.
6. The only kinds of trees that can grow at higher levels of the mountains are the  
 \_\_\_\_\_.
7. The \_\_\_\_\_ is an animal that is able to survive on mountain peaks.

Part Two: True-False (1 point each)

1. Many animals are able to live above the timberline. \_\_\_\_\_
2. Bighorn sheep are able to jump and climb quickly up and down mountains. \_\_\_\_\_
3. Mountains are a powerful force that can affect the weather. \_\_\_\_\_
4. Air gets warmer at higher levels. \_\_\_\_\_
5. When clouds begin to rise, they dry up and become sunshine. \_\_\_\_\_
6. More rain falls on land west of the mountains than on the east. \_\_\_\_\_
7. Mountains protect land on the east from high winds and snowstorms. \_\_\_\_\_

Part Three: Essay Questions (3 points each). Answer in COMPLETE sentences. Use the turn around rule to make sure your answers are complete and include as much detail as possible.

1. How do mountains affect the land around them?

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2. Draw a picture to show what happens to the land around a mountain.

3. How is plant and animal life on the highest parts of mountains different in the summer than it is in the winter? Make sure to discuss both plant and animal life in your answer.

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## Appendix S

Lesson 6 Post Test  
"A Dry Place" (30 points possible)Part One: Fill In the Blank (2 points each)

1. A \_\_\_\_\_ is an area where very little rain falls and few \_\_\_\_\_ grow.
2. The \_\_\_\_\_ of an area means the usual temperature over a long period of time.
3. An \_\_\_\_\_ is an animal with long pointed toes which help it to walk on the deep sand.
4. Unlike a forest, the soil in the desert is not good for growing plants because it has so little \_\_\_\_\_.
5. Most deserts are located in the \_\_\_\_\_ part of the United States.
6. Plants find it hard to live in the desert because the temperature always \_\_\_\_\_.
7. Desert animals get water from their \_\_\_\_\_.

Part Two: True Or False (1 point each)

1. Desert animals are more comfortable during the day than at night. \_\_\_\_\_
2. One way desert animals survive is by burrowing underground. \_\_\_\_\_
3. A Saguaro cactus is not much help to desert animals. \_\_\_\_\_
4. A cactus lets its roots sink deep into the soil so that it can drink. \_\_\_\_\_
5. Climate means the temperature on a single day. \_\_\_\_\_
6. The Saguaro cactus doesn't grow arms until about age 75. \_\_\_\_\_
7. Most deserts are very hot, but not all deserts are the same. \_\_\_\_\_

Part Three: Essay Questions (3 points each). Answer in COMPLETE SENTENCES!

1. How do plants and animals adjust to living in the desert?

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2. How is desert soil different from forest and prairie soil?

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3. How is desert life during the day different from desert life during the night?

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